AMENDMENTS TO THE SPECIFICATION

Please amend the first paragraph of the "BRIEF DESCRIPTION OF DRAWINGS" section of the application located at page 6, line 25 to page 7, line 13 as follows.

In the following the invention will be explained in detail with reference to the accompanying drawings, in which

figure 1 is a perspective view showing a preferred embodiment of the invention with its essential parts exploded seen from above,

figure 2 shows the same parts in perspective seen from below,

figure 3 shows the magnetic circuit of the transducer in figures 1-2 with magnetic flux lines indicated,

~~figure 4 shows the~~ figures 4a, 4b and 4c show views of two coils for the transducer of figures 1-2,

~~figure 5 shows~~ figures 5a, 5b and 5c show views of an alternative coil configuration based on a single twisted coil,

figure 6 shows an embodiment of the invention with two diaphragms with its essential parts exploded,

figure 7 shows an integrated diaphragm and coil system implemented using a flexprint,

figure 8 shows a version of the diaphragm and coil system of figure 7 mounted with an electronic chip,

~~figure 9 shows~~ figures 9a and 9b show views of a T-shaped double coil for the one gap embodiment of the invention,

figure 10 shows an alternative diaphragm and coil system for the one gap embodiment using flex print,

figure 11 shows the magnetic circuit of the embodiment with one gap with magnetic flux lines indicated,

figure 12 shows a cross section of the embodiment with the front cover integrated into the magnetic circuit,

~~figure 13 shows~~ figures 13a and 13b show two one-diaphragm embodiments with different front covers,

figure 14 shows an exploded view of an embodiment of figure 13a, and~~a first embodiment of figure 13,~~

figure 15 show an exploded view of~~a second embodiment of figure 13~~ an embodiment of figure 13b.

Please amend the paragraph beginning on page 7, line 33 and bridging pages 7 and 8 as follows.

The rectangular magnet 26 creates a magnetic field in the gap 28, and the magnetic return paths are defined through the short legs 22 and the long legs 21. The magnetic return paths thus completely encircle the magnetic gaps 28 with the surfaces 29 of the magnet defining a gap 28. This gives a very flat and compact structure of the magnetic system with the magnetic field concentrated in the gaps 28 and a low stray magnetic field, which

results in a high sensitivity and less need for magnetic shielding. In figures 1 and 2 the magnetic system 20 in figure 3 is situated in an e.g. plastic casing 50, e.g. by moulding or by fitting into a pre-formed "box". The casing may have a bottom closing the openings 24 or leave them open. In the shown embodiment of the transducer 10, the coil system comprises two coils. Caused by the design of the magnetic system 20 the magnetic fields in the two gaps 28 have the same direction. Thus, the coil system should preferably be arranged so that the gap portions 34 in both gaps 28 will conduct electrical current in the same direction. In opposite case the electromagnetic forces would tend to tilt the membrane rather than tending to move in a linear motion, thus resulting in poor sensitivity and distortion. Figures 4a, 4b and 4c show ~~Figures 4 shows~~ an embodiment of the coils in the coil system 30 used in the transducer 10 of figures 1 and 2. The coil system 30 comprises two similar coils each having a gap portion 34 positioned in respective ones of the gaps 28. The fastening portion 35 of the coil is used to fasten the coil to the diaphragm. In the shown embodiment the fastening portion 35 is quite large compared to the diaphragm 40, thus having a stiffening effect on the diaphragm 40 and at the same time providing a good mechanical connection between the coil and the diaphragm. Using two coils the electrical current direction in the two gaps 28 can be controlled by the electrical wiring of the coils. It is a general requirement that the electromechanical properties of the two coils are substantially identical. Differences between the two coils will tend to tilt the diaphragm, thus resulting in distortion.

Please amend the paragraph beginning on page 9, line 1 as follows.

The coil 30 is wound on a mandrel of generally rectangular cross section, whereby the coil is given the shape shown in figures 4a, 4b and 4c ~~figure 4~~ with a generally rectangular opening 32 and a generally rectangular outer contour. The rounded corners and slight curvature of the sides are due to practical problems winding a pure rectangular coil. In figure 4 the coil is relatively flat and has a thickness, which is less than its radial width between its inner and outer contours -- typically 10-30% of the radial width or according to the subsequent operations to be performed on the coil.

Please amend the paragraph beginning page 9 line 7 as follows.

After the coil 30 has been wound with the desired number of turns of wire and to the desired shape and thickness it is removed from the mandrel. While the coil 30 is still warm, and the lacquer is still soft due to the elevated temperature, the coil 30 is bent along the bending axes 33 in the plane of the flat coil using a (not shown) bending instrument. The coil is hereby given the shape shown in figure 2 and figure 4a~~the upper part of figure 4~~, where the gap portion 34 of the coil has been bent 90 degrees relative to the fastening portion 35. After the bending the coil is allowed to cool so that the lacquer is no longer flexible, and the coil stabilises. In another method of producing the coils the bending takes place on the mandrel.

Please amend the paragraph beginning on page 9, line 31 as follows.

In another embodiment the coil system 30 is formed by one single twisted flat coil, such as shown in ~~figure 5~~ figures 5a, 5b and 5c. The twisted coil has two gap portions 34 positioned in respective ones of the gaps 28. The twisting serves to give the same direction of the electrical current in the two gaps 28 obtained with one single component. The resulting cross-shaped portion 35 of the coil system where it is fastened to the diaphragm gives a stiffening effect of the diaphragm.

Please amend the paragraph beginning on page 12, line 27 as follows.

The one gap embodiment can operate with only one coil which can be formed as one of the perpendicularly bent coils as described above and shown if ~~figure 4~~ figures 4a, 4b and 4c. However, in order to make the moving system symmetrical and in addition ensure a better mechanical coupling to the diaphragm, two such coils can be glued together thus having a T-shaped cross section, such as shown in ~~figure 9~~ figures 9a and 9b. However, in another embodiment a circuit board, such as a flexprint, is used for diaphragm 140 and coil system where the wires of the coil 134,135 is a pattern on the flexprint such as sketched in figure 10 and more thoroughly described in connection with the first aspect of the invention. The flexprint can be formed so as to comprise one or more separate coils. In case of more than one coil, it is possible to electrically connect the coils either in series or parallel, or combinations hereof in case of more than two coils, such as described in the first aspect of the invention.

Please amend the paragraph beginning on page 13, line 1 as follows.

Figures 13a and 13b show ~~Figure 13 shows~~ two one-diaphragm embodiments with different front covers. Figure 13a ~~Upper part of figure 13~~ shows an embodiment with a front cover 160 with six circular sound inlet/outlet openings 161 positioned in a flat front part of the front cover 160. When used as a loudspeaker this embodiment will particularly radiate sound in a direction perpendicular to a plane formed by the front cover 160, i.e. in a front direction.

Please amend the paragraph beginning on page 13, line 6 as follows.

~~Lower part of figure 13~~ Figure 13b shows an embodiment with a front cover 260 having four sound inlet/outlet openings 261 positioned in a side part of the front cover 260, whereas a flat part forming a front part of the front cover 260 is closed. When used as a loudspeaker this embodiment will particularly radiate sound in a direction parallel to a plane formed by the front cover 260, i.e. in a side direction. This may be particularly interesting in relation to mobile communication devices such as mobile phones with the so-called side-shooting or side-firing principle. According to this principle a sound outlet is positioned on a side part of the mobile phone for use in a hands free mode. Using side-shooting instead of a normal front speaker in the hands free mode a user is protected from

hearing damages due to large sound pressures if accidentally the user puts the mobile phone close to his/her ear.

Please amend the paragraph beginning on page 13, line 16 as follows.

Figure 14 shows an exploded view of the embodiment of ~~upper part of~~ figure 13a. The front cover 160 is mounted in front of a flexprint type diaphragm 140, and a magnetic circuit is positioned within a casing 150. The front cover has an edge part adapted to fit substantially airtight to sides of the casing 150. Side parts and bottom parts of the casing 150 form together with the front cover 160 a substantially airtight enclosure of which the only acoustic opening is formed by the openings 161 in the front of the front cover 160.

Please amend the paragraph beginning on page 13, line 36 as follows.

Figure 15 shows an exploded view of the embodiment of ~~lower part of~~ figure 13b. The front cover 260 is mounted in front of a flexprint type diaphragm 240, and a magnetic circuit is positioned with a casing 260.